

ABSTRACT OF THE DISCLOSURE

Human aggrecanase and polypeptides related thereto, as well as nucleic acid compositions encoding the same, are provided. The subject polypeptides and nucleic acid compositions find use
5 in a variety of applications, including research, diagnostic, and therapeutic agent screening applications. Also provided are methods of inhibiting aggrecanase activity in a host and methods of treating disease conditions associated with aggrecanase activity, e.g. rheumatoid arthritis, osteoarthritis, infectious arthritis, gouty arthritis, psoriatic arthritis, spondylolysis, sports injury, joint trauma, pulmonary disease, fibrosis, and the like.